



The links between ecosystem and human health are many and obvious . . . It is clear that healthy ecosystems provide the underpinnings for the long-term health of economies and societies.

F. Henry Habicht, *EPA Journal*,
September-October 1990

Forum

Cancer Boom

White male baby boomers in the United States are three times as likely to get cancers unrelated to smoking as their grandfathers were, and female baby boomers are 30% more likely to develop cancers unrelated to smoking than were their grandmothers, a study says. Many researchers speculate that the cause for the increase is the existence of unspecified cancer-causing chemicals in the environment.

The findings "strongly suggest there are preventable causes [of cancer] out there that remain to be identified," said Devra Lee Davis, a senior adviser to the assistant health secretary of the U.S. Department of Health and Human Services, which led the study.

The research also revealed that heart disease deaths in a 15-year period beginning in 1973 dropped 42% in people under the age of 55 and 33% among 55- to 84 year olds. But the incidence of cancer is up among all age groups, and it is not due to smoking alone. "Many people in the cancer world have believed it was only smoking we had to pay attention to," Davis said.

Smoking-related cancer has also drasti-

cally increased. Compared with their grandmothers, women have 500% more cancers related to smoking and men have about 15% higher rates of smoking-related cancer than their grandfathers.

Similar findings were reported by researchers in Sweden this past spring. They found that Swedish females born from 1948-1957 have 1.3 times more cancer not related to smoking, and the risk of all cancer has doubled. Swedish men of the same ages have 1.7 times more cancer unrelated to smoking, and the risk of all cancer has tripled.

Researchers say the declines in heart disease and lung cancer, especially in men, are largely due to reductions in smoking and partly due to better medical management of heart disease. Thus, the causes of the increase in cancer cannot stem solely from causes shared with heart disease, such as smoking, but must reflect other environmental factors. However, many scientists who disagree with this conclusion believe that the predominant causes of these increases in cancer are factors such as diet, increased longevity, and lifestyle.

Cancer rates among farmers offer some suggestions as to why unspecified environ-

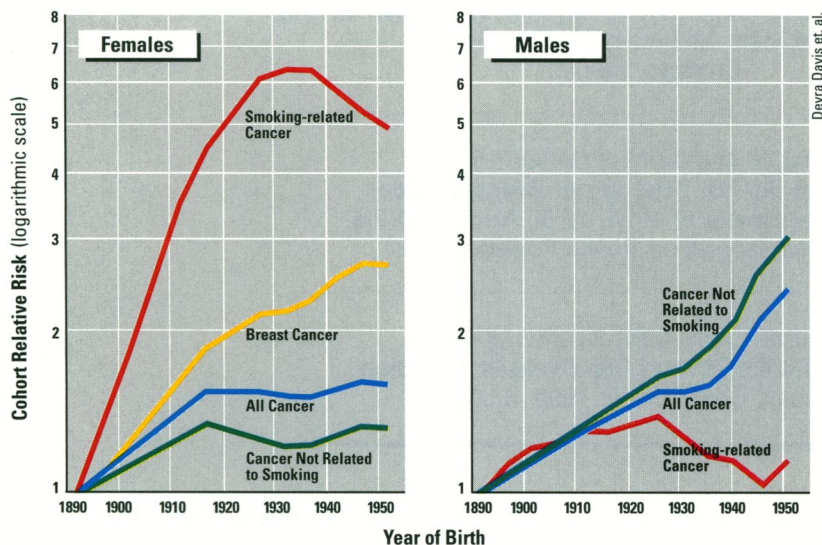
mental factors may be contributing to these increases, the report says. Farmers smoke less than most people and suffer less heart disease and lung cancer. But farmers die more often of prostate cancer, brain cancer, bone cancer, skin cancer, and non-Hodgkin's lymphoma. This may be due to their chronic exposure to engine exhausts, solvents, animal viruses, sunlight, pesticides, and fuels. "Perhaps widespread workplace and environmental exposures to these same materials account for part of the recently observed population trends," Davis said in the report. In response to these speculations, the National Cancer Institute is beginning a study of disease and environmental exposures in 100,000 American farm families.

This study was the first national analysis of a 10% sample of the U.S. population developed by the National Cancer Institute, the results of which were published in the *Journal of the American Medical Association* in February. The study only involved whites because statistics and information on other races were thought to be unreliable.

Changing of the Guardians

The spring of 1994 has seen a changing of the guardians of worker health, with new leaders heading the two government agencies dedicated to protecting America's laborers. Linda Rosenstock, head of the University of Washington's occupational and environmental medicine program and an advisor to the World Health Organization, takes command of the National Institute for Occupational Safety and Health, while Joseph A. Dear, former director of the Washington state Department of Labor and Industries, has been named assistant secretary of labor of the Occupational Safety and Health Administration.

Rosenstock moved with NIOSH from its headquarters at the Centers for Disease Control in Atlanta, Georgia, to the CDC's Washington offices. Under its mandate, NIOSH researches occupational disease and injury and develops strategies for promoting worker health. Rosenstock has



Plotting cancer progressions. A graph of relative risks shows the incidence of nonsmoking-related cancers in baby boomers is rising.